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P03655US00 (AAF-02)

PATENT APPLICATION
Serial No. 10/541,636AMENDMENT TO THE CLAIMS

1. (Canceled)
2. (Currently Amended) A valve according to claim [[1]] 2, wherein piston biasing means are arranged to bias the piston into a position in which the valve member closes the inlet.
3. (Original) A valve according to claim 2, wherein the piston biasing means comprise one or more helical springs.
4. (Currently Amended) A valve according to claim [[1]] 2, wherein the valve member is formed with an inlet surface arranged to come into contact with a valve seat of the inlet and an opposed surface facing into the housing.
5. (Original) A valve according to claim 4, wherein the area of the opposed surface of the valve member is substantially equal to the area of a surface of the piston facing said opposed surface.
6. (Currently Amended) A valve according to claim [[1]] 2, wherein the valve member has a stem slidably guided within a part of the piston.
7. (Currently Amended) A valve according to claim [[1]] 2, wherein the valve member biasing means comprises a helical spring.
8. (Canceled)
9. (Previously Presented) A valve comprising a housing having an inlet and an outlet, and a pressure sensing port, a piston slidable in a part of the housing in response to a

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difference between a first fluid pressure at the pressure sensing port on the one side of the piston, and a second fluid pressure at the inlet and/or outlet on the other side of the piston, a valve member carried by the piston and operable thereby to close the inlet when said second fluid pressure is less than a value sufficiently greater than said first fluid pressure; wherein the valve member is movable with respect to the piston to facilitate closing of the inlet, in response to a fluid flow from the housing to the inlet, biasing means being arranged to bias the valve member with respect to the piston to close the inlet, when the piston is not acting to close the inlet, wherein manual shut-off means comprising a spindle having a non-round proximal portion and a threaded distal portion are provided for closing the valve, and wherein said distal portion is engaged in a non-rotatable threaded sleeve, the sleeve being slidable along the distal portion between a normal position in which the piston is movable and a maintenance position in which the sleeve retains the piston and the valve member in the closed position.

10. (Previously Presented) A valve according to claim 2, wherein the valve member is formed with an inlet surface arranged to come into contact with a valve seat of the inlet and an opposed surface facing into the housing.
11. (Previously Presented) A valve according to claim 3, wherein the valve member is formed with an inlet surface arranged to come into contact with a valve seat of the inlet and an opposed surface facing into the housing.
12. (Previously Presented) A valve according to claim 4, wherein the valve member has a stem slidably guided within a part of the piston.
13. (Previously Presented) A valve according to claim 6, wherein the valve member biasing means comprises a helical spring.

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14. (Canceled)
15. (Currently Amended) A valve according to claim ~~[[14]]~~ 20, further comprising:
a spring biasing the piston into a position in which the valve member closes the inlet, or
one or more helical springs biasing the piston into a position in which the valve member closes the inlet.
16. (Currently Amended) A valve according to claim ~~[[14]]~~ 20, wherein the valve member has an inlet surface arranged to come into contact with a valve seat of the inlet and an opposed surface facing into the housing.
17. (Previously Presented) A valve according to claim 16, wherein the area of the opposed surface of the valve member is substantially equal to the area of a surface of the piston facing the opposed surface.
18. (Currently Amended) A valve according to claim ~~[[14]]~~ 20, wherein the valve member includes a stem slidably guided within a part of the piston.
19. (Canceled)
20. (Currently Amended) ~~A valve according to claim 14, wherein the manual shut-off comprises:~~
~~a spindle having a non-round proximal portion and a threaded distal portion;~~
or
A valve comprising:
a housing having an inlet and an outlet, and a pressure sensing port.
a piston slidable in a part of the housing in response to a difference between a
first fluid pressure at the pressure sensing port on the one side of the piston, and a

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second fluid pressure at the inlet or at the outlet or at both the inlet and the outlet on the other side of the piston.

a valve member carried by the piston and operable thereby to close the inlet when the second fluid pressure is less than a value sufficiently greater than the first fluid pressure; wherein the valve member is movable with respect to the piston to facilitate closing of the inlet in response to a fluid flow from the housing to the inlet, and

a spring biasing the valve member with respect to the piston to close the inlet when the piston is not acting to close the inlet.

a manual shut-off engaging the piston for moving the valve member against the inlet for manually closing the valve; and

a spindle having a non-round proximal portion and a threaded distal portion, wherein the distal portion is engaged in a non-rotatable threaded sleeve, the sleeve being slidable along the distal portion between a normal position in which the piston is movable and a maintenance position in which the sleeve retains the piston and the valve member in the closed position.

21. (Canceled)

22. (Previously Presented) A valve comprising:

a housing having an inlet and an outlet in fluid communication, having a cylinder part in fluid communication with the inlet and the outlet, and having a pressure sensing port in fluid communication with the cylinder part,

a piston slidable in the cylinder part of the housing in response to a difference in pressure between a first fluid pressure at the pressure sensing port on one side of the piston and a second fluid pressure at the inlet or at the outlet or at both the inlet and the outlet on an opposing side of the piston,

a valve member including a stem slidably guided by the piston and operable thereby to close the inlet when the second fluid pressure is less than a predetermined

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value sufficiently greater than the first fluid pressure; wherein the valve member is movable with respect to the piston to close the inlet in response to a fluid flow from the housing to the inlet, and the valve member having an inlet surface arranged to come into contact with a valve seat of the inlet and an opposed surface facing into the housing,

at least one helical spring biasing the piston towards a position in which the valve member closes the inlet,

a second helical spring biasing the valve member with respect to the piston to close the inlet when the piston is not acting to close the inlet

a slidable non-rotatable threaded sleeve, and

a rotatable spindle having a threaded portion engaging the slidable non-rotatable threaded sleeve, wherein the sleeve is slidable between an operating position in which the piston is movable and a non-operating position in which the sleeve retains the piston and the valve member in a position to close the inlet,

wherein rotating the spindle in one direction moves the sleeve and piston to the non-operating position to move the valve member against the inlet for closing the valve and wherein rotating the spindle in an opposite direction moves the sleeve to the operating position to allow the piston and the valve member to move toward and away from the inlet for operating the valve.